

REMARKS

I. Introduction

Claims **1-14** are currently pending in the present application. Claims **1** and **12** are independent. All pending claims stand rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over U.S. Patent No. 6,128,396 (hereinafter “Hasegawa”) in view of U.S. Patent No. 6,959,109 (hereinafter “Moustafa”).

Upon entry of this amendment, which is respectfully requested, claims **1-2, 4, 6-7, 9, and 11-14** will be amended solely to correct apparent drafting errors and/or to clarify claim terminology, and new claims **15-29** will be added. No new matter is believed to be introduced by this amendment.

Applicants hereby respectfully request reexamination and reconsideration of the pending claims in light of the amendments and remarks provided herein and in accordance with 37 C.F.R. §1.112.

II. Preliminary Issues

Initially, Applicants respectfully note that although the Examiner indicates that the Office Action mailed on May 2, 2006 as Part of Paper No./Mail Date 20060428 (hereinafter the “Office Action”) is provided in response to Applicants’ communication mailed on August 17, 2004, there is no indication that the claim amendments set forth in that communication were entered by the Examiner. In particular, claims referred to herein as claim numbers **13** and **14** were originally and erroneously filed as a ‘duplicate claim 12’ and a ‘claim 13’. These errors were corrected in the Preliminary Amendment mailed on August 17, 2004. In the Office Action, however, the Examiner appears to refer to these corrected claims as if they remained in their pre-amendment and thus erroneously labeled state (*e.g.*, the Office Action Summary states ‘claims 1-13’ are pending, when indeed claims **1-14** are pending). Correction and/or clarification is therefore requested.

Further, Applicants respectfully note that the Examiner has failed to apply the cited references to claim **3**. The Examiner simply states, for example, that Hasegawa discloses the claimed limitation (Office Action, pg. 3, lines 15-16), without pointing to any particular portion or section of Hasegawa to support the Examiner’s claim. While

Applicants have read and reviewed Hasegawa, Applicants have been unable to locate such a teaching or suggestion in Hasegawa.

Applicants respectfully note that 35 U.S.C. §132 “is violated when a rejection is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection. See, e.g., *In re Wilke*, 50 C.C.P.A. 964, 314 F.2d 558, 562, 136 USPQ 435, 439 (1963).” *Chester v. Miller*, 906 F.2d 1574 (Fed. Cir. 1990). Without any indication of the Examiner’s reasoning or support for the rejection of claim 3, Applicants are unable to effectively counter the Examiner rejection of claim 3.

Accordingly, as the Office Action fails to allow Applicants to effectively counter the outstanding rejection of claim 3, in contravention of 35 U.S.C. §132, Applicants respectfully request that a new Non-final Office Action clarifying the grounds for rejection of claim 3 be provided.

III. The Examiner’s Rejections

Claims 1-14 stand rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Hasegawa in view of Moustafa. Applicants respectfully traverse the Examiner’s rejections as follows.

A. The cited references fail to teach or suggest: *associating each captured image with a respective site location based on its respective image capture device*

Applicants respectfully assert that neither of Hasegawa nor Moustafa, alone or in combination, teaches or suggests limitations of claims 1-14. For example, Hasegawa and Moustafa fail to teach or suggest *associating each captured image with a respective site location based on its respective image capture device*.

The Examiner cites Fig. 2, blocks 14 and 15 of Hasegawa (Office Action, pg. 2, bullet 2, lines 8-9) as allegedly teaching the above-quoted limitation. Applicants have reviewed the cited portions of Hasegawa, as well as the remainder of Hasegawa, however, and have been unable to locate such a teaching or suggestion. The cited portions of Hasegawa describe calculating differences between content of image frames. It is not clear how the Examiner believes the intra and inter frame difference calculating of Hasegawa is at all related to, much less reads on, the claimed limitation of *associating*

*each captured image with a respective **site location** based on its respective image capture device.*

Applicants believe that the Examiner may be somehow confusing the term “location” with the bifurcated processing performed in Hasegawa. Accordingly, and solely for purposes of clarification, Applicants amend the term “location” herein to read “**site location**”, such that the term should properly and indisputably reference a “site location” as used and/or defined in Applicants’ specification as filed.

Applicants respectfully note that nowhere does Hasegawa teach or suggest associating a “**site location**” with each captured image *based on the image’s respective image capture device*. Nowhere, for example, does Hasegawa describe or contemplate receiving images from a plurality of remote site locations and determining which images are associated with which **site locations**.

Moustafa simply fails to make up for the deficiencies of Hasegawa. Moustafa describes systems for pose angle determination. Nowhere does Moustafa contemplate associating images with “**site locations**”.

Accordingly, at least because Hasegawa and Moustafa fail to teach or suggest *associating each captured image with a respective location based on its respective image capture device*, Hasegawa and Moustafa fail to render obvious claims **1-14**. Applicants therefore respectfully request that the §103(a) rejections of claims **1-14** be withdrawn.

B. The cited references fail to teach or suggest: *selecting at least one additional neuron based on whether the result indicates that a human is present in the first captured image*

Applicants respectfully assert that neither of Hasegawa nor Moustafa, alone or in combination, teaches or suggests limitations of claims **1-14**. For example, Hasegawa and Moustafa fail to teach or suggest *selecting at least one additional neuron based on whether the result indicates that a human is present in the first captured image*.

The Examiner states that Hasegawa “does not clearly disclose selecting additional neurons.” Office Action, pg. 3, line 1. Applicants agree. The Examiner goes on to state, however, that Moustafa teaches such a limitation. *Id.*, pg. 3, lines 1-3. Applicants respectfully disagree.

Moustafa describes utilizing two neural networks to determine a pose angle of an object, *e.g.*, for purposes of facial recognition. Each image that Moustafa processes is described as being routed to each neural network, and to each neuron therein. Nowhere does Moustafa teach, suggest, describe, or even contemplate determining which neurons to route the image to.

In contrast, the pending claims recite the limitations of *selecting a neuron, sending the image to the selected neuron, and then based on the result received from the first selected neuron, selecting an additional neuron*. As described in Applicants' specification as filed, this may comprise a form of escalation, where if a first neuron returns a result of concern (*e.g.*, it indicates that someone is inside the perimeter of a nuclear power facility), then other neurons may be activated to verify, confirm, and/or validate the potential security breach. Moustafa simply fails to teach or suggest utilizing neurons in such a fashion.

Accordingly, at least because Hasegawa and Moustafa fail to teach or suggest *selecting at least one additional neuron based on whether the result indicates that a human is present in the first captured image*, Hasegawa and Moustafa fail to render obvious claims 1-14. Applicants therefore respectfully request that the §103(a) rejections of claims 1-14 be withdrawn.

C. The cited references fail to teach or suggest: *in which at least one image capture device is configured to detect motion and capture an image in response to detected motion* (claim 4)

Applicants respectfully assert that neither of Hasegawa nor Moustafa, alone or in combination, teaches or suggests limitations of claim 4. For example, Hasegawa and Moustafa fail to teach or suggest *in which at least one image capture device is configured to detect motion and capture an image in response to detected motion*.

The Examiner cites Fig. 1, block 2, and Col. 4, lines 28-32 of Hasegawa as allegedly teaching the above-quoted limitation. Applicants respectfully note, however, that the Examiner has misinterpreted the teachings of Hasegawa.

Hasegawa describes utilizing a television camera to take continuous video footage of an area, and when the motion detector in Hasegawa detects motion, the processes of

Hasegawa are implemented to determine if the moving object is a security threat. Nowhere does Hasegawa describe the motion detection as triggering the capture of the images.

In contrast, pending claim 4 describes an image capture device that captures images **in response to the detection of motion**. Hasegawa simply fails to contemplate such a limitation.

Moustafa simply fails to make up for the deficiencies of Hasegawa. Moustafa describes systems for pose angle determination. Nowhere does Moustafa contemplate **capturing images in response to motion detection**.

Accordingly, at least because Hasegawa and Moustafa fail to teach or suggest *in which at least one image capture device is configured to detect motion and capture an image in response to detected motion*, Hasegawa and Moustafa fail to render obvious claim 4. Applicants therefore respectfully request that the §103(a) rejection of claim 4 be withdrawn.

D. The cited references fail to teach or suggest: *in which the result received from the at least one neuron is a one-bit indication of the result* (claim 5)

Applicants respectfully assert that neither of Hasegawa nor Moustafa, alone or in combination, teaches or suggests limitations of claim 5. For example, Hasegawa and Moustafa fail to teach or suggest *in which the result received from the at least one neuron is a one-bit indication of the result*.

The Examiner merely cites Fig. 3, block 29 of Hasegawa as allegedly teaching the above-quoted limitation. Applicants have reviewed the cited portion of Hasegawa, as well as the remainder of Hasegawa, however, and have been unable to locate such a teaching or suggestion. The cited portion of Hasegawa illustrates a “learning command section”. This “learning command section” of Hasegawa is described as being a storage vessel for actual result data, such that future results may be more quickly obtained with reference to this stored ‘library’. It is not clear how the Examiner believes the “learning command section” of Hasegawa is at all related to, much less reads on, the claimed limitation *in which the result received from the at least one neuron is a one-bit indication of the result*.

Nowhere does Hasegawa appear to contemplate **one-bit results**. Moustafa simply fails to make up for the deficiencies of Hasegawa. Nowhere, for example, does Moustafa describe receiving **one-bit results**. Indeed, one-bit results from neurons may not be feasible in Moustafa, since the goal of Moustafa is to determine a pose angle, which seems to necessarily require more than a single bit of information to describe.

Accordingly, at least because Hasegawa and Moustafa fail to teach or suggest *in which the result received from the at least one neuron is a one-bit indication of the result*, Hasegawa and Moustafa fail to render obvious claim 5. Applicants therefore respectfully request that the §103(a) rejection of claim 5 be withdrawn.

E. The cited references fail to teach or suggest: *in which the result received from the at least one neuron indicates uncertainty as to whether there is a human present in the image* (claims 6 and 13)

Applicants respectfully assert that neither of Hasegawa nor Moustafa, alone or in combination, teaches or suggests limitations of claims 6 and 13. For example, Hasegawa and Moustafa fail to teach or suggest *in which the result received from the at least one neuron indicates uncertainty as to whether there is a human present in the image*.

The Examiner cites Col. 7, lines 34-37 of Hasegawa (Office Action, pg. 4, lines 7-8) as allegedly teaching the above-quoted limitation. Applicants have reviewed the cited portion of Hasegawa, as well as the remainder of Hasegawa, however, and have been unable to locate such a teaching or suggestion. The cited portion of Hasegawa simply describes how the “learning command section” can improve detection results over time. It is not clear how the Examiner believes the abilities of the “learning command section” of Hasegawa are at all related to, much less read on, the claimed limitation *in which the result received from the at least one neuron indicates uncertainty as to whether there is a human present in the image*.

Nowhere does Hasegawa appear to contemplate ***the return of uncertain results***. Moustafa simply fails to make up for the deficiencies of Hasegawa. Nowhere, for example, does Moustafa describe receiving ***uncertain results from its neurons***. Indeed, uncertain results from neurons may not be feasible in Moustafa, since the goal of

Moustafa is to determine a pose angle, which seems to necessarily require a plurality of **certain** results.

Accordingly, at least because Hasegawa and Moustafa fail to teach or suggest *in which the result received from the at least one neuron indicates uncertainty as to whether there is a human present in the image*, Hasegawa and Moustafa fail to render obvious claims **6** and **13**. Applicants therefore respectfully request that the §103(a) rejection of claims **6** and **13** be withdrawn.

F. The cited references fail to teach or suggest: *in which the at least one neuron has an associated weight, and in which the node is configured to select the at least one additional neurons based further on the weight of the at least one neuron* (claim **7**)

Applicants respectfully assert that neither of Hasegawa nor Moustafa, alone or in combination, teaches or suggests limitations of claim **7**. For example, Hasegawa and Moustafa fail to teach or suggest *in which the at least one neuron has an associated weight, and in which the node is configured to select the at least one additional neurons based further on the weight of the at least one neuron*.

As described in Section III.B. herein, neither cited reference fairly teaches or describes selecting an additional neuron as described in the pending claims. Nor does either reference describe such a selection being based on a weight associated with the additional neuron. Hasegawa simply fails to describe neurons, much less weights for neurons, much less selecting neurons based on such weights. While Moustafa does describe weighted neurons, nowhere does Moustafa describe utilizing these weights to select, select additional, and/or not select neurons. Instead, the weights in Moustafa appear to be utilized to determine a confidence level associated with the neural network result – not to determine which neurons to select; as all neurons are always selected in Moustafa.

Accordingly, at least because Hasegawa and Moustafa fail to teach or suggest *in which the at least one neuron has an associated weight, and in which the node is configured to select the at least one additional neurons based further on the weight of the*

at least one neuron, Hasegawa and Moustafa fail to render obvious claim 7. Applicants therefore respectfully request that the §103(a) rejection of claim 7 be withdrawn.

G. The cited references fail to teach or suggest: *in which the at least one neuron has an associated weight, and in which the node is configured to determine an alarm condition based further on the weight of the at least one neuron* (claim 8)

Applicants respectfully assert that neither of Hasegawa nor Moustafa, alone or in combination, teaches or suggests limitations of claim 8. For example, Hasegawa and Moustafa fail to teach or suggest *in which the at least one neuron has an associated weight, and in which the node is configured to determine an alarm condition based further on the weight of the at least one neuron*.

The Examiner merely cites Fig. 3¹, block 27 of Hasegawa (Office Action, pg. 4, line 18) as allegedly teaching the above-quoted limitation. Applicants have reviewed the cited portion of Hasegawa, as well as the remainder of Hasegawa, however, and have been unable to locate such a teaching or suggestion. The cited portion of Hasegawa simply illustrates an “alarm section” that is described as being triggered when suspicious activity is detected. It is not clear how the Examiner believes the simple triggering of an alarm reads on the claimed limitation of *triggering an alarm condition based on a weight of a neuron* – especially since Hasegawa utterly fails to describe the use of neurons, much less weighted neurons.

Nowhere does Hasegawa contemplate *triggering an alarm based on a weight of a neuron*. Moustafa simply fails to make up for the deficiencies of Hasegawa. Nowhere, for example, does Moustafa describe triggering alarms, much less triggering alarms based on the weight of a neuron.

Accordingly, at least because Hasegawa and Moustafa fail to teach or suggest *in which the at least one neuron has an associated weight, and in which the node is configured to determine an alarm condition based further on the weight of the at least*

¹ The Examiner actually cites “Fig. 1” of Hasegawa, but since it is Fig. 3 of Hasegawa, not Fig. 1, that illustrates block 27, Applicants assume that the Examiner intended to cite Fig. 3.

one neuron, Hasegawa and Moustafa fail to render obvious claim 8. Applicants therefore respectfully request that the §103(a) rejection of claim 8 be withdrawn.

H. No *Prima Facie* Case of Obviousness

It is well settled that the Examiner bears the burden of establishing a *prima facie* case of obviousness based upon the prior art. *In re Fritch*, 23 U.S.P.Q.2D 1780, 972 F.2d 1260, 1265 (Fed. Cir. 1992). To reject claims in an application under Section 103, an examiner must show an un-rebutted *prima facie* case of obviousness. *In re Rouffet*, 47 U.S.P.Q.2D 1453, 149 F.3d 1350, 1355 (Fed. Cir. 1998). If examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent. *In re Oetiker*, 24 U.S.P.Q.2D 1443, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 5 U.S.P.Q.2d 1596, 837 F.2d 1071 (Fed. Cir. 1988); *In re Jones*, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992). Prior knowledge in the field of the invention must be supported by tangible teachings of reference materials, and the suggestion to combine references must not be derived by hindsight from knowledge of the invention itself. *Cardiac Pacemakers v. St. Jude Medical* 381 F.3d 1371, 1376 (Fed. Cir. 2004). Furthermore, particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed. *In re Kotzab*, 55 U.S.P.Q.2D 1313, 217 F.3d 1365, 1371 (Fed. Cir. 2000).

A finding of obviousness requires that the art contain something to suggest the desirability of the proposed combination. *In re Grabiak*, 226 U.S.P.Q. 870, 769 F.2d 729, 732 (Fed. Cir. 1985). In the absence of such a showing, there is inadequate support for the position that the proposed modification would *prima facie* have been obvious. *Id.* The absence of such a suggestion to combine is dispositive in an obviousness determination. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 42 U.S.P.Q.2D 1378, 110 F.3d 1573, 1579 (Fed. Cir. 1997).

In the present case, the Examiner simply cites Col. 5, lines 1-10 (of an undisclosed one of the two cited references) as providing support for the alleged motivation to combine the references as suggested by the Examiner. Applicants have reviewed the cited portion, as applied to each reference, and have been unable to ascertain what alleged teaching or suggestion in the references the Examiner is referring to. It is unclear, for example, even after reading the cited section(s), what “evidence” the Examiner is attempting to rely on to prove motivation. Applicants accordingly and respectfully request clarification.

Even if the motivation was based solely on the Examiner’s statement that “[t]he suggestion/motivation for [combining the references] would have been calculating output values at different situations” (Office Action, pg. 3, lines 6-7) – which is not possible in accordance with applicable statutes, regulations, and case law – it is not clear how the alleged motivation of “calculating values at different situations” is related to the pending claims.

The pending claims, for example, determine a first neuron, send an image to the first neuron, and, based on a processing result received from the first neuron, select a second neuron and send the image to the second neuron. An alarm condition may then be identified based on the results received from the second neuron. It is not clear how such embodiments are believed to be associated with “calculating values at different situations.” To which values does the Examiner refer? To which “different situations” does the Examiner refer? And why, of all the references available in the art, would one of ordinary skill be motivated to modify Hasegawa by adding teachings from Moustafa? Why would the specific teachings identified by the Examiner have been chosen? And why/how could all this have been done without being able to use Applicants’ specification as a blueprint for the combination? The unresolved nature of these questions is evidence that a *prima facie* case for obviousness has not been set forth by the Examiner.

Accordingly, at least because the Examiner has failed to establish a *prima facie* case for obviousness, Applicants respectfully request that this §103(a) ground for rejection be withdrawn.

IV. New Claims

New claims **15-29** are believed to be patentable over the cited references at least as described herein. Further, after reviewing the cited references, Applicants believe that none of the cited references, alone or in combination, teach, suggest, or render obvious at least:

- (i) *electing, after the determining that the result is indicative of a detection of a human presence in association with the first sensed data, at least one additional neuron from the plurality of available neurons (claims 15-23);*
- (ii) *determining, based at least in part on the determining that the additional result is also indicative of a detection of a human presence in association with the first sensed data, an alarm condition (claims 15-23);*
- (iii) *wherein the first sensed data is received pursuant to a transmission of an indication of the first sensed data from the first sensor, and wherein the transmission is triggered by a detection of motion at the first remote location (claim 16);*
- (iv) *wherein the pre-processing software is configured based on a characteristic of the first remote location (claim 18);*
- (v) *incorporating one or more of a digital watermark and a digital fingerprint into the first sensed data (claim 19);*
- (vi) *determining a type of data associated with the first sensed data and selecting the at least one neuron from the plurality of available neurons based on a weight of the at least one neuron that is associated with the same type of data of the first sensed data (claims 20-21);*
- (vii) *receiving, after the receiving of the image from the image capture device, a first monitoring session initiation request from a first user and a second monitoring session initiation request from a second user (claim 24);*
- (viii) *receiving, after the providing, a first response associated with the image from the first user and a second response associated with the image from a second user, wherein the first and second responses comprise indications that a human is present in the image (claim 24);*
- (ix) *registering a plurality of sites, wherein the registration of each site comprises receiving a request from an entity associated with one of the plurality of sites, the request*

*comprising an indication that the entity desires to register the one of the plurality of sites to be monitored by a plurality of remote patrollers (claims **25-28**);*

*(x) providing, after the testing and to the plurality of remote patrollers, (i) an image captured by one of the plurality of cameras associated with the one of the plurality of sites, and (ii) a request for a binary determination associated with the image (claims **25-28**);*

*(xi) wherein the image captured by the one of the plurality of cameras associated with the one of the plurality of sites is provided to the plurality of remote patrollers as an image associated with a reel of a slot machine (claim **26**);*

*(xii) facilitating a conferring regarding the image amongst the plurality of remote patrollers (claims **27-28**);*

*(xiii) wherein the facilitating comprises initiating one or more instant messaging sessions associated with the image (claim **28**); or*

*(xiv) wherein the binary determination comprises a determination of whether less than two people are present in the image (claim **29**).*

V. Conclusion

At least for the foregoing reasons, it is submitted that all pending claims are now in condition for allowance, *or in better form for appeal*, and the Examiner's early re-examination and reconsideration are respectfully requested.

Alternatively, if there remain any questions regarding the present application or the cited reference, or if the Examiner has any further suggestions for expediting allowance of the present application, the Examiner is cordially requested to contact Carson C.K. Fincham at telephone number 203-461-7017 or via electronic mail at cfincham@walkerdigital.com, at the Examiner's convenience.

VI. Petition for Extension of Time to Respond

Applicants hereby petition for a **one-month extension** of time with which to respond to the Office Action. Please charge **\$120.00** for this petition to our Deposit Account No. 50-0271. Please charge any additional fees that may be required for this Response, or credit any overpayment to Deposit Account No. 50-0271.

If any additional extension of time is required, please grant a petition for that extension of time which is required to make this Response timely, and please charge any fee for such extension to Deposit Account No. 50-0271.

Respectfully submitted,

September 1, 2006
Date

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